## **CLAIMS**

What is claimed is:

1. A wireless mobile phone comprising:

a plurality of components coupled to each other to facilitate wireless telephony communication by a user;

a plurality of sensors to facilitate real time capturing of a heart beat profile of the user; and

operating logic to receive the real time captured heart beat profile of the user and to selectively operate the components depending on whether the user is successfully authenticated via a real time captured heart beat profile of the user.

- 2. The wireless mobile phone of claim 1, wherein the operating logic further comprises logic to compare the real time captured heart beat profile of the user against a reference heart beat profile.
- 3. The wireless mobile phone of claim 1, wherein the operating logic further comprises logic to save the real time captured heart beat profile of the user as a reference heart beat profile for authentication.
- 4. The wireless mobile phone of claim 1, wherein the wireless mobile phone further comprises a reader to facilitate provision of the reference heart beat profile via an identity card.

5. The wireless mobile phone of claim 4, wherein the reference heart beat profile is stored on said identity card in a manner to be read by a reader selected from the reader group consisting of an electronic reader, an optical reader, and a magnetic reader, and the wireless mobile phone further comprises the selected reader.

- 6. The wireless mobile phone of claim 1, wherein the wireless mobile phone further comprises a reader to facilitate retrieval of the reference heart beat profile from a storage removably attached to the wireless mobile phone.
- 7. In a wireless mobile phone, a method of operation comprising:
  capturing in real time a heart beat profile a user;
  authenticating the user using the real time captured heart beat profile of the user; and

operating a plurality of components of the wireless mobile phone to facilitate wireless telephony communication by the user, beyond a set of functions not requiring user authentication, if the user is successfully authenticated via the real time captured heart beat profile of the user.

- 8. The method of claim 7, wherein the method further comprises comparing the real time captured heart beat profile of the user against a reference heart beat profile.
- 9. The method of claim 7, wherein the method further comprises saving the real time captured heart beat profile of the user as a reference heart beat profile for authentication.

10. The method of claim 7, wherein the method further comprises retrieving the reference heart beat profile from an identity card.

- 11. The method of claim 7, wherein the method further comprises retrieving the reference hear beat profile from a storage removably attached to the wireless mobile phone.
- 12. A wireless mobile phone comprising:

a plurality of components coupled to each other to facilitate wireless telephony communication by a user, with the components being equipped to operate in at least a selected one of a first mode and a second mode; and

operating logic to operate the components in said first mode without authentication of the user, and to operate the components in said second mode if the user is successfully authenticated based at least in part on a bio-metric input.

- 13. The wireless mobile phone of claim 12, wherein the operating logic enables the components to provide first one or more functions, including a function to retrieve a bio-metric reference from a storage removably attached to the wireless mobile phone, while operating the components in said first mode, and further enables the components to provide second additional one or more functions, while operating the components in said second mode.
- 14. The wireless mobile phone of claim 13, wherein the bio-metric input comprises a heart beat profile of the user to be authenticated.

15. In a wireless mobile phone, a method of operation comprising:

operating a plurality of components coupled to each other to facilitate wireless telephony communication by a user, in a first mode, prior to authenticating the user; receiving bio-metric input for authenticating the user; and operating the components in a second mode if the user is successfully authenticated based at least in part on the bio-metric input.

- 16. The method of claim 15, wherein said operating of the plurality of components in said first mode comprises enabling the components to provide first one or more functions, including retrieving a bio-metric reference from a storage device removably attached to the wireless mobile phone, and said operating of the plurality of components in said second mode comprises enabling the components to further provide second one or more functions.
- 17. The method of claim 15, wherein the bio-metric input comprises a heart beat profile of the user to be authenticated.